IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, the system comprising:

a photo-exposure unit for adjusting a photo-exposure time of a photo-exposure step performed on a semiconductor device in the semiconductor manufacturing apparatus, in accordance with one or more adjustment signals;

a pre-exposure step influence prediction unit for obtaining information about a semiconductor device in the manufacturing apparatus during a pre-exposure processing, prior to the device being subjected to the photo-exposure step, the information including a value of a factor that will influence a line width of a line formed on the semiconductor device in the photo-exposure step, and providing that information as feed forward data;

an inspection unit for generating an inspection value by measuring an aspect of the semiconductor device after it has been subjected to the photo-exposure step, and providing the inspection value as feed back data; and

a central processing unit for receiving the feed forward data and the feed back data, and generating the one or more adjustment signals based on the feed forward data and the feed back data.

2. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein the feed forward data is obtained by qualifying the obtained information.

3. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein one or more adjustment signals are transmitted to the photo-exposure unit by the central processing unit in a real time.

4. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein the one or more adjustment signals are generated through the use of a calculation formula.

5. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein the calculation formula weights the feed forward and feed back data.

6. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein the central processing unit comprises a database containing information obtained from the photo-exposure unit, the pre-exposure step influence prediction unit, and the inspection unit.

7. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 1, wherein the feed forward data pertains to the thickness of a film formed in processing of the pre-exposure step.

8. (Original) The system for adjusting a photo-exposure time in a semiconductor manufacturing apparatus, as recited in claim 7, wherein the film is a reflection barrier layer formed in the pre-exposure step.

9. (New) A method comprising:

determining attributes of a semiconductor wafer;

determining light exposure time of a photolithographic process according to the determined attributes of the semiconductor wafer; and

exposing the semiconductor wafer to light in the photolithographic process for the determined light exposure time.

10. (New) The method of claim 9, wherein a film is deposited on the semiconductor wafer.

11. (New) The method of claim 10, wherein the film is a silicon-nitrogen film.

12. (New) The method of claim 10, wherein said attributes of the semiconductor wafer comprise reflectivity of the film on the semiconductor wafer.

13. (New) The method of claim 10, wherein said attributes of the semiconductor wafer comprise the thickness of the film on the semiconductor wafer.

14. (New) The method of claim 9, wherein said determining attributes of the semiconductor wafer comprises measuring the semiconductor wafer.

15. (New) An apparatus comprising:

a first component which determines attributes of a semiconductor wafer;

a second component which determines light exposure time of a photolithographic process according to the determined attributes of the semiconductor wafer; and

a third component which exposes the semiconductor wafer to light in the photolithographic process for the determined light exposure time.

16. (New) The apparatus of claim 15, wherein a film is deposited on the semiconductor wafer.

17. (New) The apparatus of claim 16, wherein the film is a silicon-nitrogen film.

18. (New) The apparatus of claim 16, wherein said attributes of the semiconductor wafer comprise reflectivity of the film on the semiconductor wafer.

19. (New) The apparatus of claim 16, wherein said attributes of the semiconductor wafer comprise the thickness of the film on the semiconductor wafer.

20. (New) The apparatus of claim 15, wherein said first component which determines attributes of the semiconductor wafer measures the semiconductor wafer.